



Regional Aviation Safety Group - Pan America (RASG-PA) Overview

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Air transport is the safest mode of transportation



Global Accident Rate

(Accidents per million departures)



Source: ICAO Safety Report 2014 Edition

Scheduled commercial operations. Maximum Take-off Weight (MTOW) above 5700 kg

Despite the crisis, air transport industry keeps growing providing social and economic benefits



ICAO Statistics show

3.0 billion
*+4.7%
growth rate vs. 2011*

*Passengers carried
in 2012**



6.4 billion
*+4.4%
average annual
growth rate*

*Forecasted passengers carried
in 2030*

31 million
*+0.7%
vs. 2011*

*Aircraft departures
in 2012**



59 million
*+3.6%
average annual
growth rate*

*Forecasted aircraft departures in
2030*

**Preliminary figures*

Traffic Statistics for Revenue Scheduled Services

Economic & Social Benefits

Air Transport Facts

SOCIAL BENEFITS

60 million jobs → Worldwide
Directly and supporting sectors

ECONOMIC BENEFIT

2 trillion USD = 3.5% GDP
global

**Aviation annually carries more than half of the
1 billion international tourists**



The International Civil Aviation Organization sets the Standards and Recommended Practices (SARPs) necessary for aviation safety, security, efficiency and environmental protection on a global basis

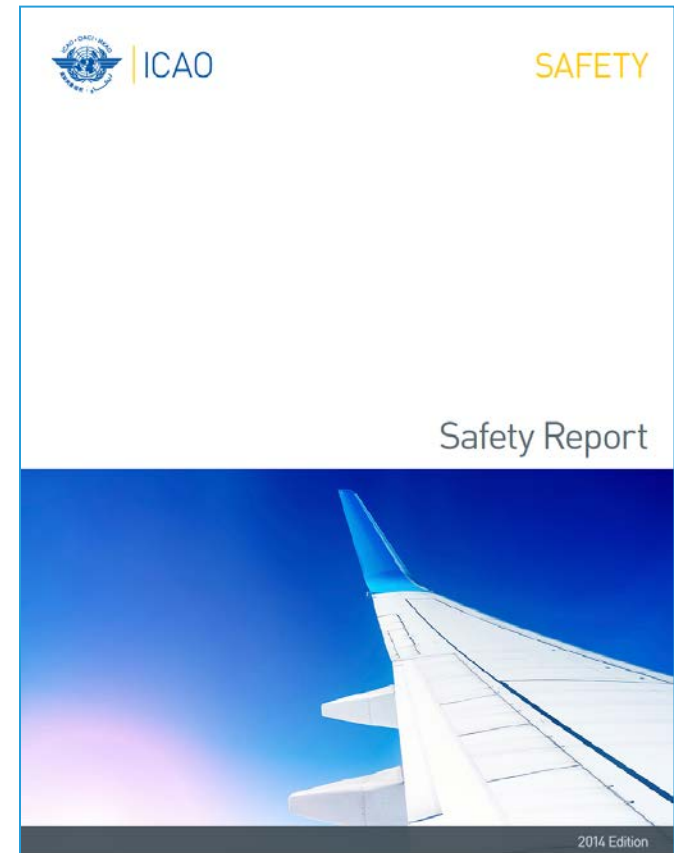
Safety is one of the strategic objectives of ICAO



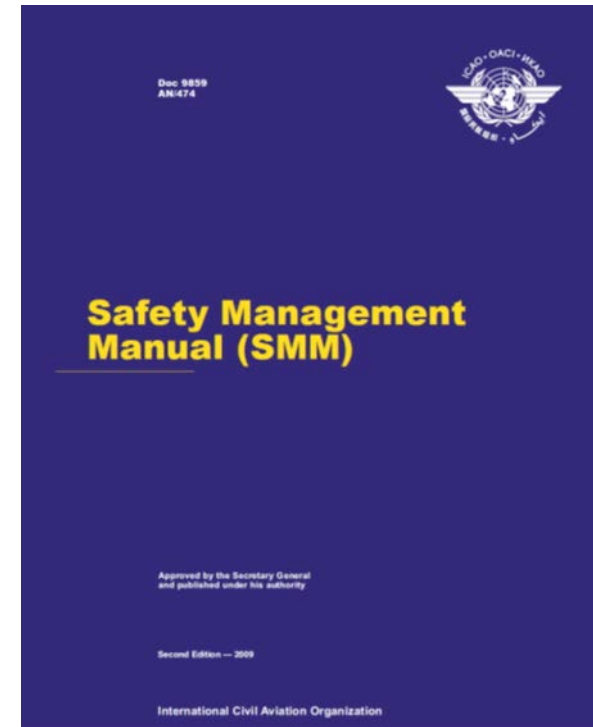
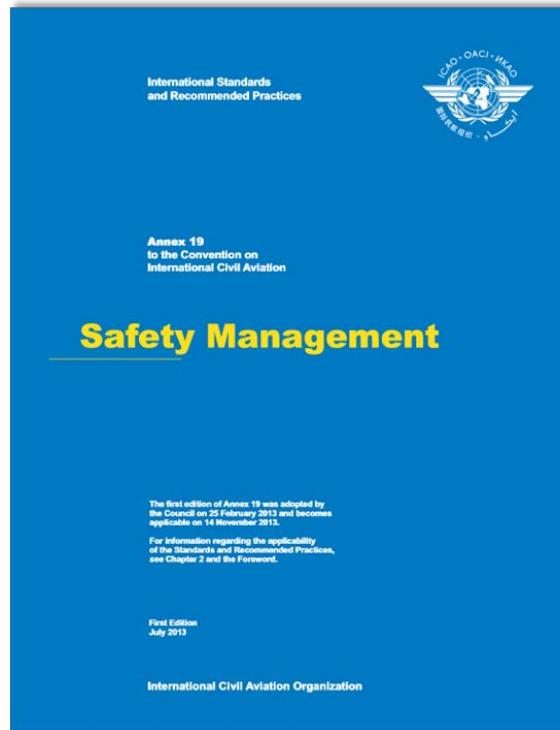
ICAO and all the stakeholders are working in partnership to improve safety



For ICAO Safety is paramount...



ICAO developed the new Global Aviation Safety Plan (GASP), the Annex 19 and the Safety Management Manual



One of the contributors for this safety record is the Regional Aviation Safety Group – Pan America (RASG-PA)



The RASG-PA Annual Safety Report shows that the number of accidents in the Pan American Region is decreasing...



Table 3. Pan America General Aviation Operations⁵ Accidents

Aircraft Maximum Take-off Mass above 2,250 to 27,000 kilograms
Source: ICAO ADREP/ECCAIRS

Year	Total Accidents ³	Fatal Accidents ⁴	Total Fatalities
2002-2011 avg.	219	57.4	137.4
2011	110	27	58
2012	18	5	16

General aviation: for this report, general aviation operation includes all civil aviation operations other than scheduled and non-scheduled commercial air transport operations.

Table 2. Pan America Scheduled Commercial Air Transport Operations² Accidents

Aircraft Maximum Take-off Mass above 27,000 kilograms

Source: Boeing - ICAO ADREP/ECCAIRS

Year	Total Accidents ³	Fatal Accidents ⁴	Total Fatalities
2002-2011 avg.	23.9	1.2	59.9
2011	27	0	0
2012	4	0	0

Regional Aviation Safety Group Pan America (RASG-PA)

First in the World
(2008)

Multi-regional

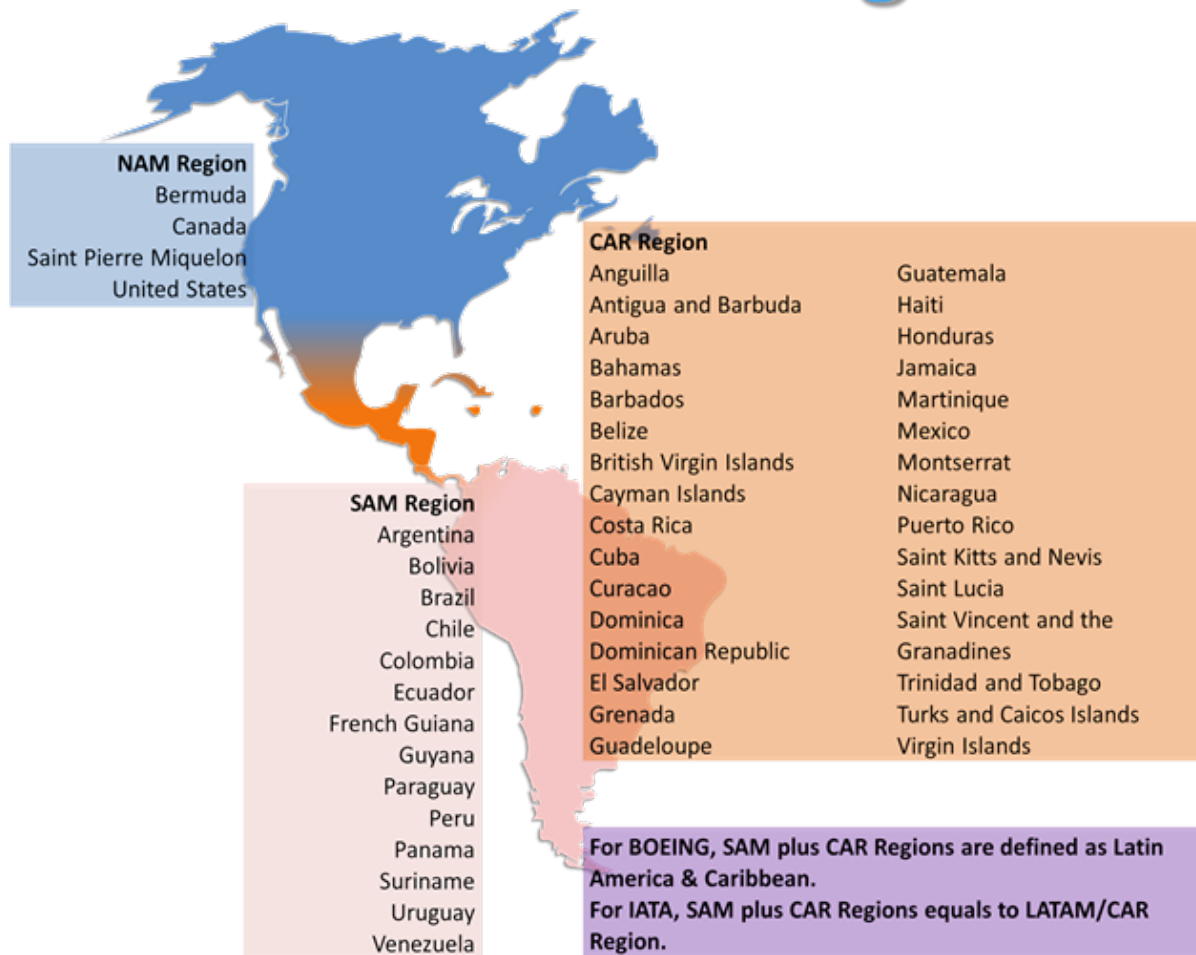
States/Territories,
Intl' Organizations
& Industry

Adopted in other
ICAO Regions

Aligned with
GASP

Data-driven

Pan America Region



RASG-PA Mission



**To improve safety and
efficiency in the Pan
America Region**



RASG-PA Vision



**To involve all the
stakeholders in a
coordinated effort**



RASG-PA Membership

34 NAM/CAR/SAM States, 19 Territories and...



Executive Steering Committee (ESC)



Co-Chair Boeing
(International
organizations &
Industry)



VP United States



VP Costa Rica



VP Curacao and
Co-Chair
(States/Territories)



VP Brazil



VP Chile



RASG-PA is a data-driven, results oriented organization



RASG-PA uses safety data from different sources

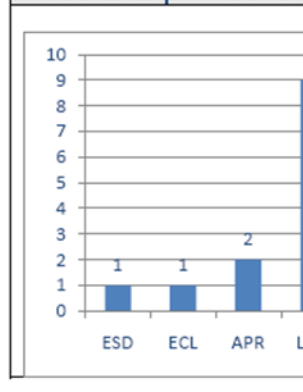
Fatal Accidents by CAST/ICAO Taxonomy Accident Pan American* Airline Domicile – 2000 through 2006

Accident Type	2000	2001	2002	2003	2004	2005	2006	Total
CFIT	1	1	1	1	1	1	1	6
LOC-I	1	1	1	1	1	1	1	6
RE-Landing + ARG	1	1	1	1	1	1	1	6
RAMP	1	1	1	1	1	1	1	6
MIC	1	1	1	1	1	1	1	6
SCF-NP	1	1	1	1	1	1	1	6
OTHER	1	1	1	1	1	1	1	6
SCF-PP	1	1	1	1	1	1	1	6

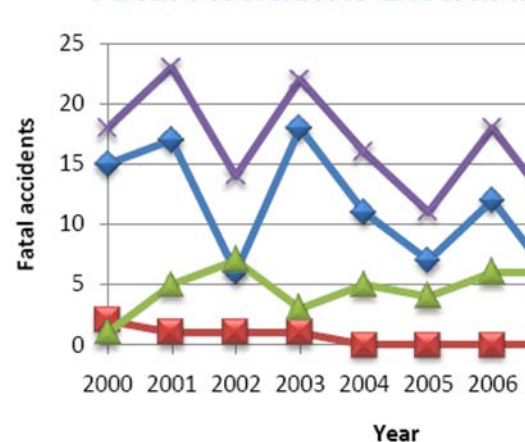


North America		IATA Members	
14 Accidents (2009)		Hull Losses	
		Fatal	
Passenger	Cargo	Ferry	Jet
64%	36%	0%	100%

Accidents per Phase of



Fatal Accidents Distribution



ASIAS Member

44 Airlines

- | | |
|----------------------------------|-------------------------|
| ABX Air | GoJet Airlines |
| Air Wisconsin Airlines | Hawaiian Airlines |
| Alaska Airlines | *Horizon Air |
| Aloha Air Cargo | JetBlue Airways |
| American Airlines | Mesa Airlines |
| American Eagle Airlines | Miami Air International |
| Atlas Air | North American Airlines |
| Cape Air | Omni Air International |
| Chautauqua Airlines | Piedmont Airlines |
| CitationAir | Pinnacle Airlines |
| CommutAir | Polar Air Cargo |
| Compass Airlines | PSA Airlines |
| Delta Air Lines | Republic Airlines |
| Empire Airlines | Shuttle America |
| Evergreen International Airlines | Silver Airways |
| ExpressJet | SkyWest Airlines |
| FedEx Express | Southern Air |
| Frontier Airlines | Southwest Airlines |
| | Spirit Airlines |



Trans States Airlines
United Airlines
United Parcel Service
US Airways
Virgin America
World Airways

Government

FAA, NASA,
Naval Air Force Atlantic,
USAF Safety Center

Industry

AIA, Airbus, ALPA,
A4A, Boeing, CAPA, NACA,
NATCA, RAA, SWAPA

*Newest Member

As of 14 February 2013

RASG-PA uses different types of safety information



REACTIVE: safety analysis based upon past occurrences (accidents and incidents) in the Pan American Region

PROACTIVE: includes analysis of States' existing conditions (ICAO SARPs implementation, traffic variations) and service providers (IATA Operational Safety Audits, ramp inspections)

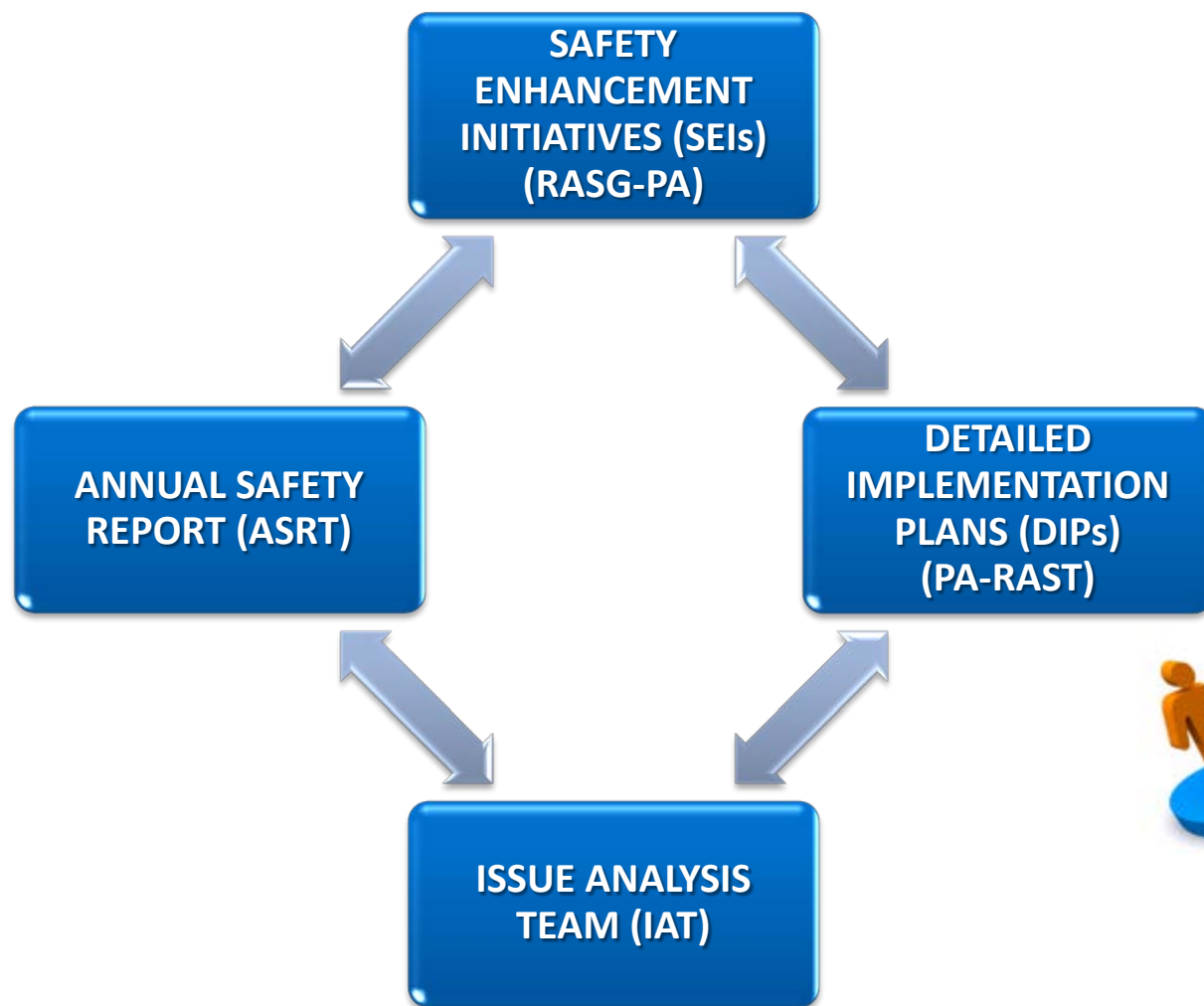
PREDICTIVE: based upon analysis of Flight Operations Quality Assurance (FOQA) de-identified data, oriented towards identifying potential future hazards for initiating corresponding mitigation actions

Top Risk Areas in Pan American Region

- Runway Excursion (RE)
- Loss of Control In-flight (LOC-I)
- Controlled Flight Into Terrain (CFIT)
- Mid Air Collision (MAC)



RASG-PA PROCESS



RASG-PA Develops SEIs to Tackle the Main Risk Areas

Runway Excursion
(RE)

Controlled Flight
Into Terrain (CFIT)

Loss of Control-
Inflight (LOC-I)

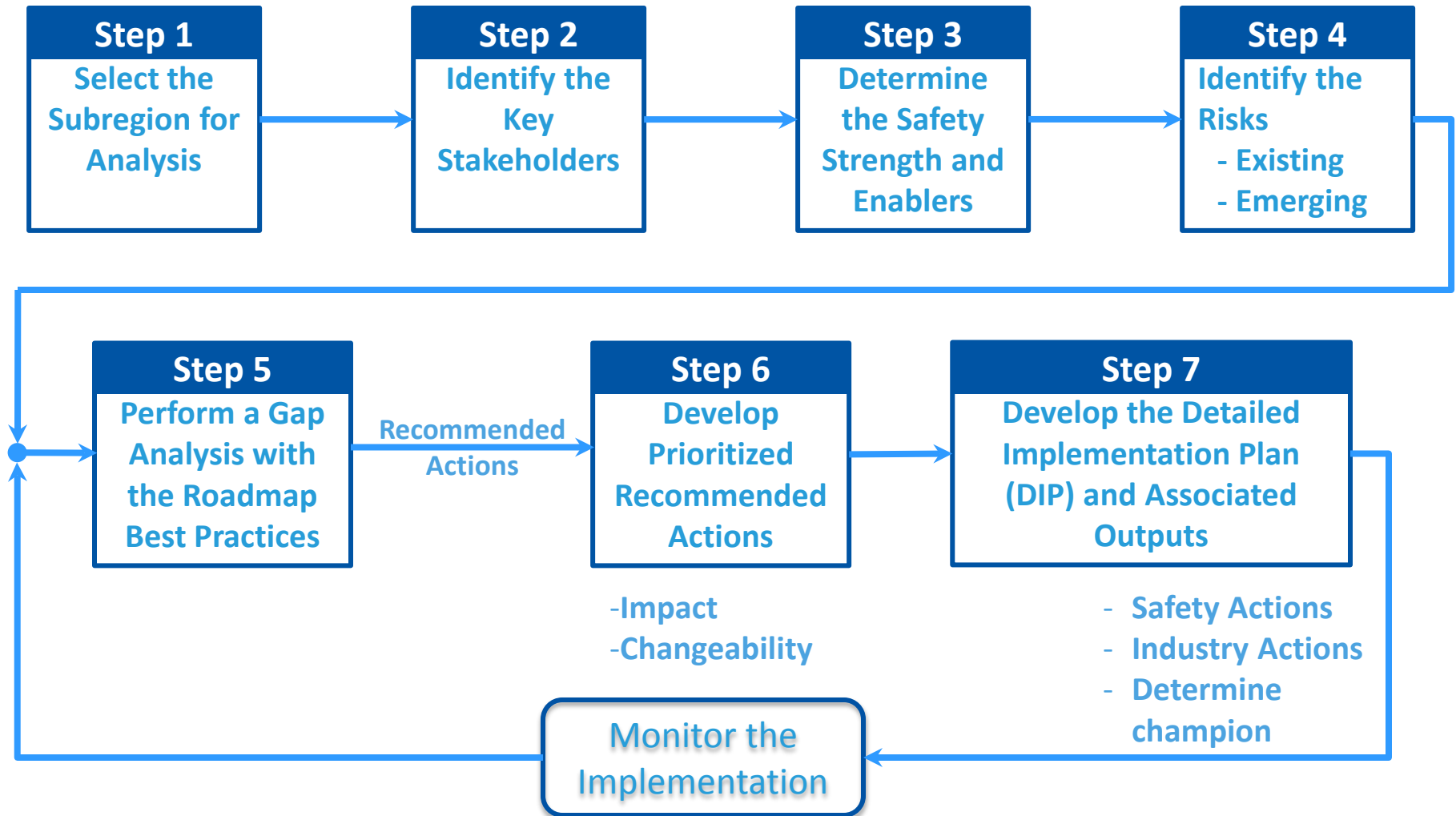
Mid-Air Collision
(MAC)

new

Every SEI has an associated Detailed Implementation Plan (DIP)

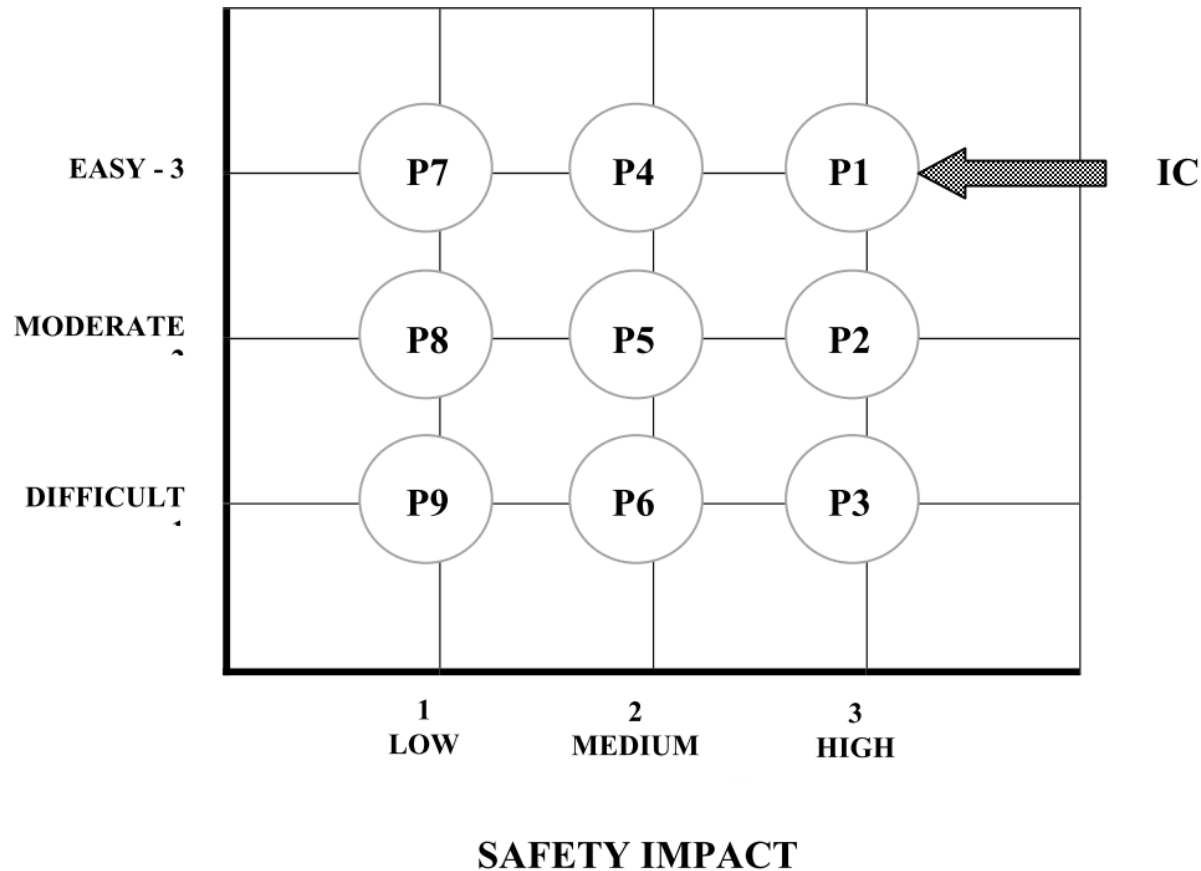


Development of a SEI



Selection Criteria

Impact-changeability (IC) Level Chart



RE DIPs & Outputs

DIP	Description	Champion	Status
RE/04	Promote pilot adherence to Standard Operating Procedures (SOPs) for approach procedures including go-around decision making process	ALTA	Completed
			Completed
RE/09	Specific Training for pilots and air traffic controllers to avoid unstabilized approaches	ALTA	Completed
			In process
RE/8	Guidance in maintaining runway in accordance with Annex 14	ACI-LAC	Completed
			Completed
			Completed
RE/11	Develop guidance material and training programs to create action plans for runway safety teams	DGAC Mexico	Completed
			Completed
			Completed

LOC-I DIPs & Outputs

DIP	Description	Champion	Status
LOC-I/06	LOC-I Training – Human factors and automation	PA-RAST	Completed
			Completed
			Completed
			Completed
LOC-I/07	LOC-I Training – Advanced maneuvers	ALTA	Completed
			Completed
			Superseded
LOC-I/09	LOC-I Training - Pilot monitoring policies and procedure for the operator and training program for crews	IFALPA	Completed
			Completed
			Completed
			Completed

CFIT DIPs & Outputs

DIP	Description	Champion	Status
CFIT/02	Specific ALAR/CFIT Training for Pilots	IATA	Completed
			Completed
CFIT/04	CRM/Situational Awareness for pilots and air traffic controllers	IFALPA & IFATCA	Completed
			Completed

SEI Summary

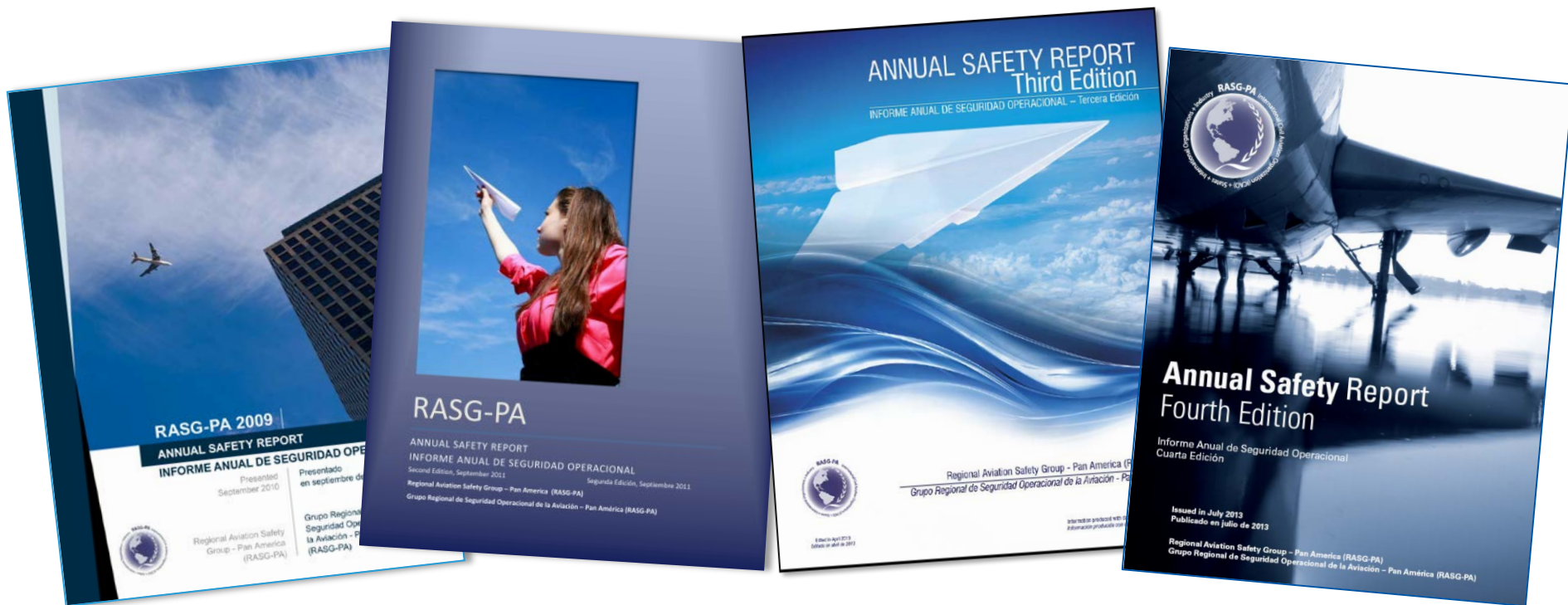


**New SEIs are under development by the
Safety Enhancement Teams (SETs)**

RASG-PA Deliverables

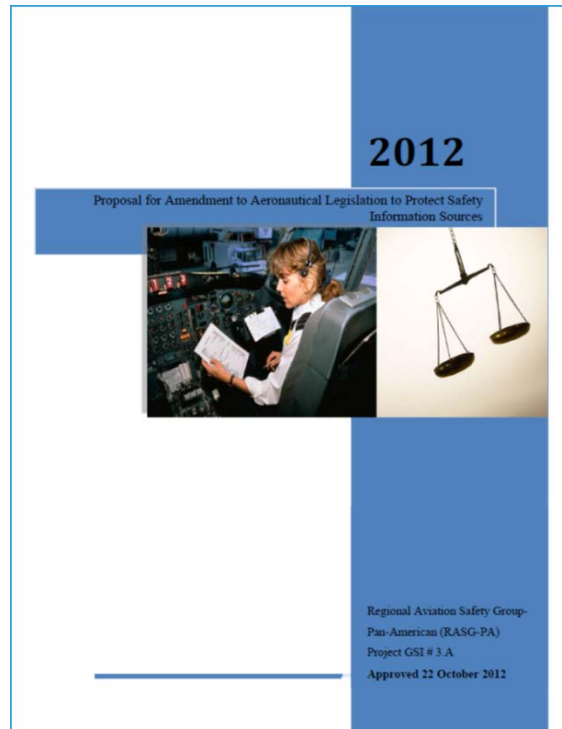


RASG-PA publishes Annual Safety Reports



Measuring Results

Created the Proposal for Amendment to Aeronautical Legislation to Protect Safety Information Sources



Pan American Aviation Safety Summits

1st Pan American AVIATION SAFETY SUMMIT

Working together for a safer industry



April 19-23, 2010
Sao Paulo, Brazil

in partnership with ALTA 

2nd PAN AMERICAN AVIATION SAFETY SUMMIT 2011



June 15-16 Mexico City

Working together for a safer industry

in partnership with ALTA 



3rd PAN AMERICAN AVIATION SAFETY SUMMIT

June 19-21 2012 *Bogotá* Colombia



JUNE 25-26, 2013
SAN JOSE, COSTA RICA

Upcoming Fifth Pan American Aviation Safety Summit in partnership with ALTA and hosting State Curaçao



- Annual Plenary Meetings
- Aviation Safety Seminars and Workshops
- Projects
- RASG-PA Safety Advisories – RSA
- Training Tools
- Dedicated Website



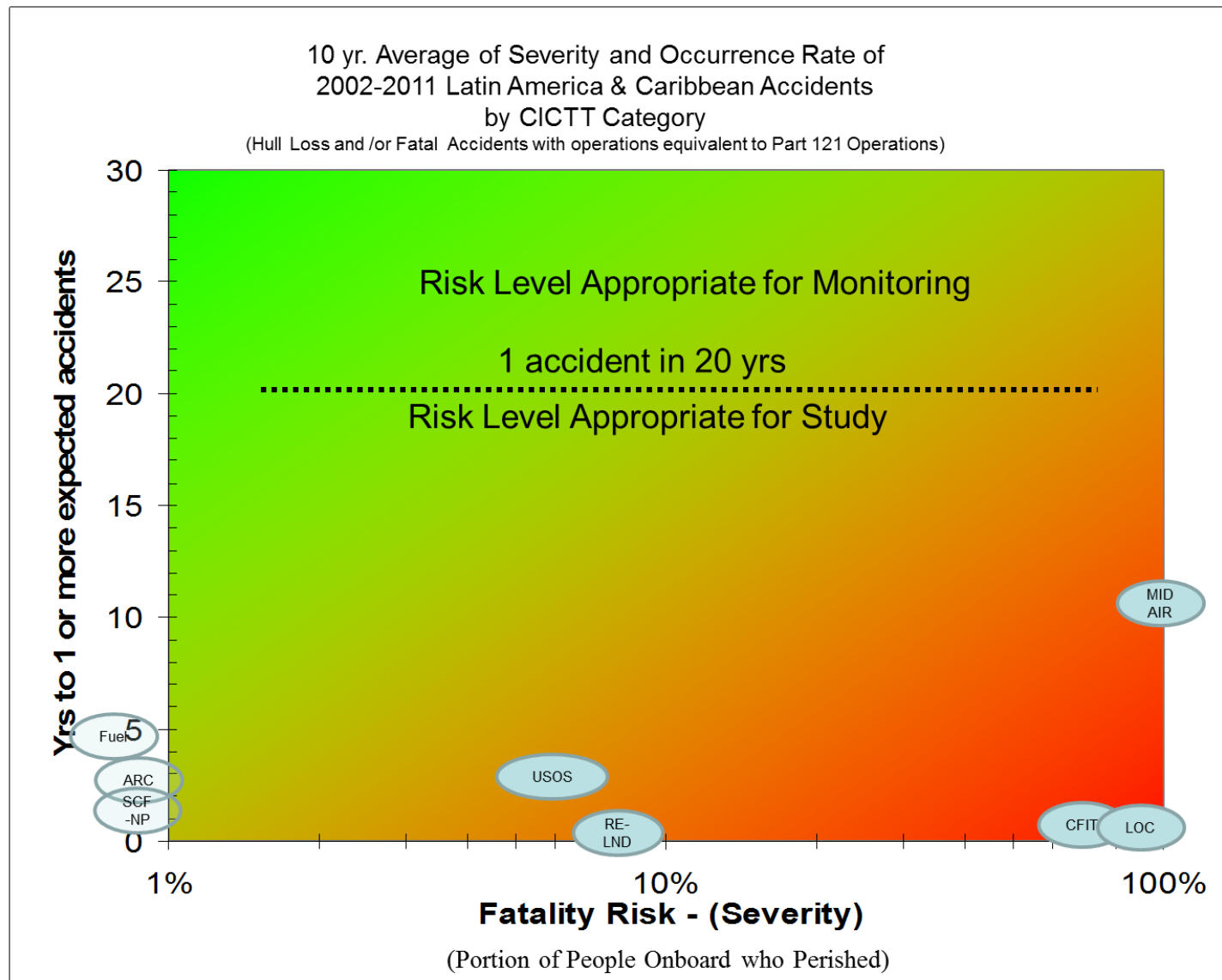
But there is a need to do more about safety



RASG-PA Risk Reduction Goal

Using 2010 as a baseline, is to reduce fatality risk for Part 121 or equivalent operations by 50% by the year 2020 in Latin America and the Caribbean





Managing Aviation Safety Risks Faces Many Challenges

- Traffic growth
- New air transport operators
- Significant number of new aircraft orders
- Demand for skilled aviation personnel
- Training capacity
- Attractiveness of aviation
- Attrition related impact
- Infrastructure deficiencies
- Resources
- Political will

RASG-PA Main Plans 2014 - 2016

- Align RASG-PA work programme with GASP
- Support roll-out of GASP & Annex 19
- Improve RASG-PA processes and procedures
- Mitigate RE, CFIT, LOC-I & MAC risks
- Monitor/act regarding regional safety issues
- Improve coordination with GREPECAS
- Establish contact with other RASGs
- Improve participation of stakeholders
- Positioning as the strategic regional safety forum
- Support ICAO with data collection for safety dashboard

We are very
ambitious
setting our
safety
targets...



...but we are confident that with everybody's commitment and continuous support it will be achieved



We need your commitment!





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Thank you!